REMARKS/ARGUMENTS

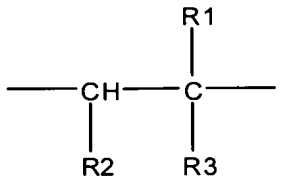
Claims 1, 2, 7-9, 17-19 are pending. Claims 1, 2 and 7-9 are withdrawn from consideration as being drawn to non-elected subject matter.

The rejection of Claims 17-19 under 35 U.S.C. § 103(a) over JP 05-117334 and Arakawa et al and the specification at page 2, second paragraph, is traversed.

Claim 17 of the present invention relates to an **optical film exhibiting negative birefringence**, which comprises:

a resin composition, which comprises:

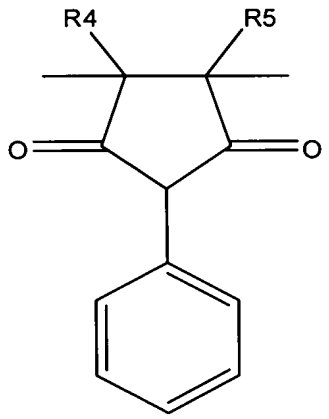
(a) 30-95% by weight of a copolymer comprising an a-olefin residual group unit represented by the following formula (i):



(i)

wherein R1, R2 and R3 each independently represent hydrogen or an alkyl group having 1-6 carbon atoms, and

an N-phenyl-substituted maleimide residual group unit represented by the following formula (ii):



(ii)

wherein R4 and R5 each independently represent hydrogen, or a linear or branched alkyl group having 1-8 carbon atoms; and

having a weight average molecular weight, as reduced into standard polystyrene, of 5×10^3 to 5×10^6; and

(b) 70-5% by weight of at least one acrylonitrile-styrene based copolymer selected from an acrylonitrile-styrene copolymer and an acrylonitrile-butadiene-styrene copolymer, a weight ratio of an acrylonitrile residual group unit to a styrene residual group unit being 20/80 to 35/65, and having a weight average molecular weight, as reduced into standard polystyrene, of 5×10^3 to 5×10^6,

the optical film being obtained by biaxially stretching the resin composition,

the optical film having a relationship of three-dimensional refractive indexes of nz>ny≥nx or nz>nx≥ny in the case where the stretching direction is define as an x-axis and a y-axis within a film plane, a direction outside the film plane and perpendicular to the x-axis and y-axis is defined as a z-axis, a refractive index in the x axis direction is defined as nx, a refractive index in the y-axis direction is defined as ny, and a refractive index in the z-axis direction is defined as nz.

The optical film has optical characteristics including a negative birefringence and a relationship of three-dimensional refractive indexes of $nz > ny \geqq nx$ or $nz > nx \geqq ny$. Further, the film exhibits excellent heat resistance and dynamic characteristic and is particularly suitable as a retardation film. The film comprises 30 to 95% by weight of a copolymer (a) comprising an α-olefin residual group unit represented by the formula (i) and an N-phenylmaleimide residual group unit represented by the following formula (ii) and 70 to 5% by weight of an acrylonitrile-styrene based polymer (b). The optical film is obtained by biaxial stretching.

As acknowledged by the Examiner, JP 05-117334 describes that an olefin-N-phenyl substituted maleimide copolymer has merely excellent transparency, thermal resistance and surface hardness, that polystyrene different in constitution from that of the invention of the present application exhibits a negative birefringence, and that a blend of two resins exhibits a property intermediate between those of the two resins by counteracting the properties of respective resins to each other.

However, the optical material described in JP 05-117334 exhibits low birefringence and, therefore, it is unable to be used as an optical film where the birefringence represented by a retardation film is positively utilized and, in the examples of said optical material described in the paragraphs [0034] to [0035], there is no description for optical film and retardation film where the birefringence is positively utilized.

Further, in JP 05-117334, there is no description or suggestion, not only for a biaxial stretching of an optical material, but also for carrying out a stretching processing.

To begin with, the optical material described in JP 05-117334 is intended to achieve the characteristic of low birefringence (zero birefringence) and the technique has been

achieved in the direction of eliminating the birefringence. On the other hand, in the optical film of the invention of the present application exhibiting negative birefringence, although the intrinsic characteristic is "negative", its technique has been achieved in the direction of achieving the birefringence whereby it is apparent that the ideas between the techniques are entirely different from each other.

In JP 05-117334, there is only a description of a general blend of the olefin-N-phenyl substituted maleimide copolymer and the resin.

As pointed out by the Examiner, in US 5,213,852, it is described that a **uniaxially** stretched film of a styrene/acrylonitrile copolymer has a negative birefringence. It is also described to blend a styrene/acrylonitrile copolymer with another polymer.

However, the film is inferior in heat resistance , see Comparative Example 3 in the specification of the present application.

The description in column 2, lines 49 to 52 in US 5,213,852 pointed out by the Examiner relates to Japanese Patent Provisional Publication No. 2(1990)-256023 which is described as prior art of US 5,213,852, and relates to polystyrene and acrylonitrile as examples of materials for a biaxially stretched film, that is different from not only the constitution of the invention of the present application but also the description of US 5,213,852.

US 4,605,700 is discussed at page 2 of the specification. In US 4,605,700, there is a description for a composition comprising an N-phenyl substituted maleimide-olefin copolymer and an acrylonitrile-styrene copolymer and it is described that the composition exhibits miscibility.

However, in US 4,605,700, there is only a description for the composition exhibiting miscibility and there is neither description nor suggestion not only for an optical film but also

for an optical film exhibiting the specific relationship for three-dimensional refractive indexes due to a biaxial stretching and exhibiting a negative birefringence.

The examiner states that it would have been obvious to a person skilled in the art to combine the descriptions of JP 05-117334, US 5,213,852 and that of US 4,605,700 to obtain the invention of the present application. However, as described above, JP 05-117334 provides a material exhibiting a **low birefringence** and its object is to eliminate the birefringence. On the other hand, an object of US 5,213,852 is that the birefringence is expressed and positively utilized the same as in the invention of the present application. Thus, it is considerably difficult even for persons skilled in the art to combine the characteristics which are **contrary to each other**.

Further, in JP 05-117334, there is only a description of a general blend of the olefin-N-phenyl substituted maleimide copolymer and the resin. In US 5,213,852, it is only described that a uniaxially stretched film of a styrene/acrylonitrile copolymer has a negative birefringence. In US 4,605,700, there is only a description that a composition comprising an N-phenyl substituted maleimide-olefin copolymer and an acrylonitrile-styrene copolymer exhibits miscibility. These descriptions are quite different in the constitution, advantage and object (optical characteristics) from the invention of the present application. It is apparent that even if the descriptions are simply combined, the invention of the present application can not be achieved.

Consequently, the invention of the present application is not obvious over JP 05-117334, US 5,213,852 and US 4,605,700, alone or in combination.

Therefore, rejection of Claims 17-19 under 35 U.S.C. § 103(a) over JP 05-117334 and Arakawa et al are believed to be unsustainable as the present invention is neither anticipated nor obvious and withdrawal of this rejection is respectfully requested.

Applicants submit that the present application is in condition for allowance. Early notice to this effect is earnestly solicited.

Respectfully submitted,

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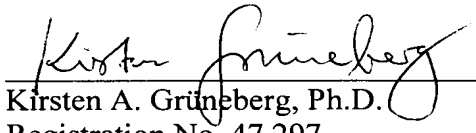

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